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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/960,215	09/21/2001	William Dudley Currie	DN2001168USA	5159

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EXAMINER

KNABLE, GEOFFREY L

ART UNIT

PAPER NUMBER

1733

DATE MAILED: 09/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/960,215

Applicant(s)

CURRIE ET AL.

Examiner

Geoffrey L. Knable

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO MONTH for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 1-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 12-15 and 17-20 is/are rejected.
- 7) ☒ Claim(s) 16 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

1. Applicant's election without traverse of species II (overlapping linkage embodiment; figs. 4A-4D) in Paper No. 4 is acknowledged.
2. Claims 1-11 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 4.
3. The disclosure is objected to because of the following informalities:

There is no brief description of figures 1C and 1D.

Appropriate correction is required.
4. Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 14, no antecedent has been established for "said links".

Also in claim 14, the reference made to the links being movable between a "generally axial" and a "generally radial" position is indefinite when read in light of the underlying disclosure in the specification. In particular, the specification describes that the links are movable from a position in which they are "both nearly parallel to the axis 404" and a position "at an angle approximately halfway between parallel to and perpendicular to the axis 303" (it is assumed this was intended to refer to axis "404" rather than "303"). Since an angle that is halfway between parallel and perpendicular would seem to be neither radial nor axial, it is not clear what is meant particularly by "generally radial" in claim 14, this rendering the scope of this claim indefinite and confusing.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 12-15 and 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Gazuit (US 3,971,694) or Leblond (US 3,547,733).

Gazuit discloses a tire building drum including plural radially expandable segments (9) and support elements (10) as well as various parts (e.g. 16) that can be termed flanges that are centered about the central axis a certain distance apart and flank the support elements on either side. Further, guide rings (12) and an overlapping

linkage (14, 15) between the guide rings (12) and the support elements (10) are also shown. This is considered to suggest a drum consistent with claim 12.

Leblond discloses a tire building drum including plural radially expandable segments (e.g. 25; note that segments 25 are spaced circumferentially from one another, i.e. separated by segments 26) and underlying support elements (i.e. flange underlying the drum segments – see figs. 2, 4) as well as various parts (e.g. 4, 6) that can be termed flanges that are centered about the central axis a certain distance apart and flank the support elements on either side. Further, axially movable guide rings that support (at e.g. 30, 31) an overlapping linkage (11, 12) between the guide rings and the support elements are also shown. This is also considered to suggest a drum consistent with claim 12.

As to dependent claims 13-15 and 17-19, it is considered clear that the segments and links in each reference are symmetrically connected, located at the drum center and operable consistent with each of these claims.

9. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Leblond (US 3,547,733) as applied to claims 12-15 and 17-19 above, and further in view of Becker et al. (US 5,591,288).

To include pockets in the drum ends would have been obvious in light of the teachings of Becker et al. (e.g. col. 3, lines 8+) to enable building run flat tires in a manner that avoids trapping air.

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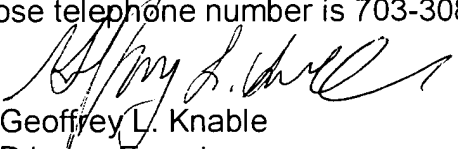
10. Claim 16 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Although including flanges with radial grooves to radially guide radially movable tire building drum segments is known in this art (e.g. note fig. 3 of Katagiri et al. (US 3,929,546)), and although tire drums with overlapping linkages as claimed are known (note the rejections above), the drums with overlapping linkages operate in an entirely different manner from those with radial guide flanges and would not have been viewed by the artisan as reasonably combinable. The closest prior art, then, whether taken alone or in combination, would not teach or render obvious providing a tire building drum as claimed that includes such flanges guiding segment supporting elements as well as a pair of axially movable guide rings and an overlapping linkage mechanism provided between the guide rings and support element as claimed.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 703-308-2062. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael W. Ball can be reached on 703-308-2058. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.


Geoffrey L. Knable
Primary Examiner
Art Unit 1733

G. Knable
September 3, 2003